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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,700	10/27/2003	Daisuke Okamura	8012-1122-1	4049

466 7590 09/06/2005

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EXAMINER

RONESI, VICKEY M

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/694,700	OKAMURA ET AL.	
	Examiner	Art Unit	
	Vickey Ronesi	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-7 are now pending in the application.
2. All outstanding objections and rejections are withdrawn in light of applicant's amendment filed 6/29/2005.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
4. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 6/29/2005. In particular, claim 1 has been amended to recite a ratio of surface size to nitrogen absorption of the carbon black. This limitation was not present in the original claims. Thus, the following action is properly made final.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claims 1 and 4, support is not found in the specification for a range of "equal to or greater than 260 m²/g". It is the examiner's position that this phrase fails to satisfy

Art Unit: 1714

the written description requirement of 35 USC 112, first paragraph since there does not appear to be a written description requirement of the phrase “equal to or greater than $260 \text{ m}^2/\text{g}$ ” in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163. Applicant has not pointed to any portion of the specification, and examiner has not found any support for this phraseology in the specification as originally filed. While there is support for “ $260 \text{ m}^2/\text{g}$ ” on page 81, line 12 of the specification, no support for the presently claimed range is had.

With respect to claims 2, 3, and 5-7, they are rejected for being dependent on a rejected claim.

6. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1 and 4, the newly added phrase of “wherein a ratio of surface size to nitrogen absorption of said carbon black is equal to or greater than $260 \text{ m}^2/\text{g}$ ” causes confusion since it is unclear how a ratio can have units (i.e., m^2/g) and what the term “surface size” is intended to represent (e.g., surface area?). To advance compact prosecution, the examiner has interpreted the “ratio” to read on specific surface area.

With respect to claims 2, 3, and 5-7, they are rejected for being dependent on a rejected claim.

Claim Rejections - 35 USC § 103

7. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lieberman (US 5,424,013) in view of evidence given by Wypych (*Handbook of Fillers*).

It is noted that claims 2, 3, 5, and 6 are product-by-process claims and therefore “even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). In particular, the process limitation of claims 2 and 5 wherein the crushed material is “melted, extruded and cut to form said recycled plastic pellet” and the process limitation of claims 3 and 6 wherein the carbon black and oxidation inhibiting material “are added as a master batch plastic pellet, said carbon black and said oxidation inhibiting material being mixed with a thermoplastic resin, melted, extruded and cut at a regular size to form said mater batch plastic pellet” are therefore given no patentable weight.

Lieberman discloses a thermoplastic recycling process that produces a recycled plastic material that is re-used in a similar fashion as virgin material (col. 9, lines 1-4), such as exterior or interior parts of a vehicle, i.e., molded parts (col. 2, lines 34-35). The recycled plastic materials comprise crushed used plastic material (col. 6, lines 6-10) and additives such as antioxidant (i.e., oxidation inhibiting material), carbon black, and rubbers (i.e., new plastic material containing rubber) such as block copolymer rubber and other impact modifiers (col. 6, line 48 to col. 7, line 19). Given that a reference that clearly names a claimed species anticipates

Art Unit: 1714

that species no matter how many additional species are named, it is clear that Lieberman anticipates the presently cited claims. See MPEP § 2131.02.

With respect to claims 2 and 5, although the process limitation is given no weight, it is noted that the presently claimed process in the product-by-process claims are immediately envisaged from Figure 1 of Lieberman when property differences are not observed at step 20 but are observed at step 29, necessitating the addition of the aforementioned additives.

Lieberman fails to disclose the ratio of surface size of carbon black in claim 1 and the particle diameter of carbon black in claim 7.

Wypych discloses that carbon black conventionally has a specific surface area 7-560 m²/g and a particle diameter of 15-250 nm (page 62).

Given that Lieberman is open to the use of any carbon black and further given that carbon black typically has specific surface area and particle diameter as taught by Wypych, it would have been obvious to one of ordinary skill in the art to utilize suitable carbon blacks, including those like presently claimed, in the composition of Lieberman and thereby arrive at the presently cited claims.

Response to Arguments

8. Applicant's arguments filed 6/29/2005 have been fully considered but they are not persuasive. Specifically, applicant argues that Lieberman fails to suggest that the presently claimed carbon black provides for improved performance of the recycled, molded, plastic component.

Art Unit: 1714

In response to applicant's argument, while applicant shows improved properties for 260 m²/g when compared to 110 m²/g, claim 1 recites a range of 260 m²/g and higher and that range would have been obvious to one of ordinary skill in the art considering the breadth of the claimed range and applicant's failure to support that these improved properties are observed through the presently claimed range.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1714

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

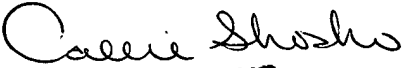
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/29/2005

vr




CALLIE E. SHOSHO
PRIMARY EXAMINER